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CLEARING THE WATERS

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Clean Water Act Section 319(h) Request for Proposals Revisions Announced

By Julie Arvidson

The much-anticipated Clean Water Act (CWA) section 319(h) Request for Proposals (RFP) will be released in mid-October, but with significant changes. The Watershed Protection Section (WPS) of the Surface Water Quality Bureau (SWQB) is refining the New Mexico Nonpoint Source Management Program goals to focus on Total Maximum Daily Load (TMDL) implementation, which is reflected in this year's CWA §319(h) RFPs. The RFPs will focus on two priorities:

1. Watersheds containing stream segments that have approved TMDLs.
2. Watersheds containing stream segments where data has been assessed and TMDLs are scheduled to be developed in the near future.

A TMDL can be best described as a watershed budget for pollutant inputs to a watercourse. TMDLs are established for individual stream segments for each pollutant. The SWQB develops TMDLs on the CWA §303(d) list of impaired waters. The TMDL documents are planning documents that provide pollution reduction targets and guidance on how to reduce pollutant loads. All TMDLs in a particular watershed should be considered collectively when developing restoration strategies.

The RFPs are becoming more focused because there are now more TMDLs written for New Mexico's watersheds than ever before, making it possible to better utilize the TMDL documents for watershed restoration efforts. To date, eleven watersheds have had TMDLs approved or data assessed for future TMDLs. (See map next page.)

The RFPs are separated into two initiatives, both of which address the priorities listed above and are intended to provide a holistic response to watershed impairments. The first initiative is the

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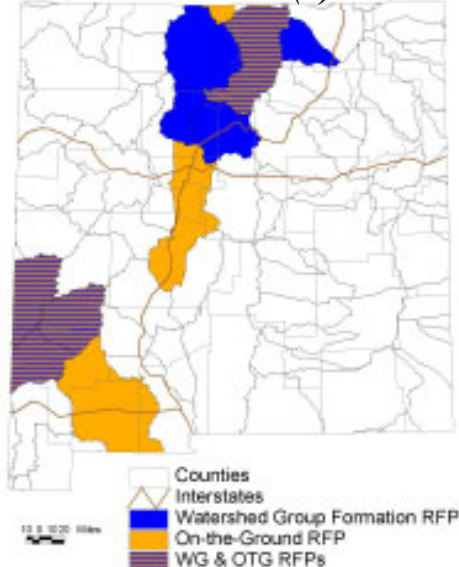
Priority Watersheds for FY04 Clean Water Act Section 319(h) Grants

development of watershed groups with broad watershed-wide stakeholder participation and a primary goal of improving water quality through implementation of TMDLs.

The second initiative is to provide financial support for established watershed groups that are ready to implement on-the-ground projects to address TMDLs. Any person, governmental entity, or organization can respond to these RFPs.

The Watershed Group RFP is targeting the following watersheds to form watershed groups: Conejos, Upper Rio Grande, Rio Grande-Albuquerque, Upper Gila, Upper Gila-Mangas, Mimbres, and San Francisco. The results expected from proposals that win this RFP are:

1. Development of a watershed group, focusing on impaired stream reaches for which TMDLs have been written or data and assessments are complete.
2. Hire or contract a Watershed Coordinator.
3. Secure the involvement of local government and/or quasi-governmental public entities to act as fiscal agents for the watershed group in order to implement future on-the-ground projects.
4. Write an approvable watershed restoration action strategy, watershed implementation plan, or management plan that incorporates prioritization of impaired stream reaches for which TMDLs have been written or data and assessments are complete.



5. Develop workplans for future funding of on-the-ground watershed rehabilitation projects that apply BMPs in order to implement TMDLs in impaired stream reaches within the watershed.

By accomplishing these results, newly formed watershed groups will position themselves to apply for future on-the-ground project funding.

The On-The-Ground project RFP is targeting the following watersheds: Upper Rio Grande, Rio Grande-Pajarito Plateau, Rio Chama, Cimarron, Jemez, Rio Grande-Santa Fe, Upper Gila, Upper Gila-Mangas and San Francisco. These watersheds have completed TMDLs or assessed data for future TMDLs. Proposed on-the-ground workplans must address impaired stream reaches indicated in the TMDLs.

The WPS will hold public meetings issuing the RFPs and answering questions on October 15, 2003 in Taos, Albuquerque, and Silver City. The deadline to respond to the RFP is December 15, 2003. The RFPs can be found online at <<http://www.nmenv.state.nm.us/swqb>>.

CLEAN WATER ACT SECTION 401/404 CASE STUDY: Correcting a Violation on the Rio Puerco near Cabezón, New Mexico

By Michael Coleman and Daniel Guevara

The Rio Puerco Watershed is characterized by high sediment load, flash floods, and erosive vertical banks. In December 2001, a rancher recognized how sediment and erosion was impacting his land along the Rio Puerco and decided to take matters into his own hands. He was concerned how the river was eroding the banks and threatening an adjacent stock pond, which is the primary source of water for his cattle. He decided to divert the flow away from his pond by straightening the channel using a backhoe to dig a straight diversion ditch. He then went on to extend the ditch over a mile, cutting off flow to several very large meanders. In the process, riparian plants were damaged and destroyed and large quantities of excavated soil were deposited in the meandering channel bottom. This work resulted in a major modification of the

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channel geometry of the Rio Puerco and threatened to cause more major erosion problems. By straightening the channel, the rancher was unknowingly increasing the channel gradient and flow velocity and thus the power of the river to further incise and undermine an already deeply incised channel.

A concerned citizen noticed what was going on and contacted the Bureau of Land Management (BLM) Albuquerque Field Office. The BLM manages much of the channel and the land on one side of the river, while the rancher grazes cattle on private and BLM-leased land on the other side. When BLM was informed of this activity, they contacted the Army Corps of Engineers and the New Mexico Environment Department Surface Water Quality Bureau (SWQB), which are the two agencies that regulate dredge and fill activities in the waters of New Mexico. They found that the landowner had conducted dredge and fill activities without a permit, in violation of Section 404 of the Clean Water Act (CWA), which regulates work within the ordinary high water mark of “Waters of the United States”.

Normally, a person seeking authorization to work in a waterway would apply for a 404 permit from the U.S. Army Corps of Engineers. In addition, Section 401 of the Clean Water Act requires that the State review the 404 permit to ensure water quality degradation will not occur as a result of the permitted

activity. Typically, the 404 and 401 permits are requested before work begins in a stream. However, on occasion the public is apparently unaware of this permit requirement and work begins in the stream without the necessary authorization.



Before: Diversion of Rio Puerco dug by Cabezón rancher.



After: Fill of diversion to maintain channel stability.

In this case the rancher was contacted by the US Army Corps of Engineers and instructed to halt further work in the Rio Puerco. The SWQB provided a letter stating the consequences of straightening of the channel on the Rio Puerco and what needed to be done to ensure further problems would not occur.

Cutting the straight diversion ditches would ultimately lead to increased local and downstream erosion. The area where this construction was performed was showing an upward trend towards stability and reduced erosion. The flourishing riparian vegetation, natural sinuosity and stable gradient were keeping flow velocities in check. When the channel was cut down and straightened the gradient was increased and it could be expected that flow velocity would increase markedly. The dredged sediments would be incorporated in the flows, the missing vegetation could no longer assist in stabilizing this stream reach, and increased erosion and sediment loading would be expected to further degrade the Rio Puerco. Furthermore, the new, straightened channel cuts could potentially advance upstream, impacting the work underway by the Rio Puerco Management Committee (RPMC) to prevent erosion and redevelop stream and riparian habitat above La Ventana (see *CTW* Vol. 8 No. 2 for more information about watershed restoration underway in the Rio Puerco Watershed).

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Cabezón continued from page 3 Together, the SWQB, BLM and COE determined that the rancher needed to backfill the trenches and plant new vegetation to make up for what was lost. By July 2002, the rancher had backfilled the trenches and the agencies verified that the restoration work had been completed and declared that the rancher was no longer in violation of the Clean Water Act. The BLM agreed to monitor the site for five years, after which the rancher will need to seed or replant if vegetation has not returned.

The Rio Puerco's problems are region-wide and any impact to the river can affect other sections of the main channel and other tributaries as well. Acting on his own, this rancher did not fully realize the problems that could occur as a result of his dredging and filling activities. However, collaborating with actively involved organizations, the situation was corrected before serious damage could occur. With the rancher's continued cooperation and participation, the possibility now exists that future in-channel work can be developed to solve problems and to halt further degradation of the Rio Puerco.

NATIONAL FORESTS RANGER DISTRICTS WORK TOGETHER TO IMPROVE PRODUCTIVITY OF WATER QUALITY IMPROVEMENT PROGRAMS

By Delbert Trujillo

On December 31, 2003 the Coyote Ranger District of the Santa Fe National Forest concluded the Jarosa/Rio Puerco Riparian-Rangeland Improvement Project. The project included the implementation of Best Management Practices (BMPs) such as trick tanks, earthen dams, fencing, cattleguard installations, and a range management plan for each grazing allotment. The purpose of implementing these BMPs is to improve water quality in riparian areas and improve the surrounding rangelands. The Watershed Protection Section (WPS) of the New Mexico Environment Department felt that the Coyote Ranger District had done an exceptional job on the Jarosa project and therefore worked to facilitate an exchange of information between the Coyote Ranger District and the El Rito Ranger District prior to implementation of a similar project in the El Rito District. The El Rito project includes BMP implementation for water quality improvement of the Rio Vallecitos, and spring re-habilitation in the surrounding grazing allotments. By conducting a field review with the Coyote Ranger District, El Rito Ranger District staff will have an opportunity to ask questions about the Jarosa project and its BMP implementation plan.

The El Rito Ranger District is located in the Carson National Forest. Beginning near the turn of the century, the area has been impacted by natural forces, timber harvesting, and grazing which has led to the migration of sage into roughly 300 acres of rangeland that was once part of a savannah of piñon trees and tall grasses. The El Rito Ranger District staff will visit with Coyote Ranger District staff to tour an area that has been brush hogged and seeded. The visit will help the El Rito Ranger District assess the types of BMPs that can be employed in its restoration activities.

In facilitating joint field reviews, the Watershed Protection Section anticipates that the El Rito Ranger District and the Coyote Ranger District will begin to establish a dialogue between the Districts and National Forests where they are located. This dialogue should help to maximize the quality of the El Rito project and prevent the pit falls experienced in previous similar projects. This cooperative process pays dividends in the end because it reduces the time needed to gather information and thereby increases productivity.

FUTURE EVENTS

October

19-22, American Institute of Hydrology will be sponsoring a conference in Atlanta, Georgia entitled, "Achieving Sustainable Water Resources in Areas Experiencing Rapid Population Growth". The theme of the conference centers around water resources and problems associated with rapid population growth. Download the registration form at <<http://dnrnet.dnr.state.ga.us/aih/registration.html>>.

27-30, The First Interagency Conference on Research in the Watersheds will be held in Benson, Arizona and will emphasize watersheds as a planning unit for agencies. Fire, economy, and hydrology are among the topics covered by this conference. For more information, log onto <<http://www.tucson.ars.ag.gov/unit/ICRW.htm>>.

November

3-5, The 7th International Conference on Ecology and Management of Alien Plant Invasions will be held in Ft. Lauderdale, Florida. This conference will bring together various disciplines to discuss the threatening plants. For more information, log onto <<http://esa.org/ipinams-emapi7/>>.

16-19, The Water Environment Federation is sponsoring a conference entitled, "Total Maximum Daily Load 2003 Specialty Conference" in Chicago, Illinois. This conference will feature talks on nutrient and bacteria TMDLs and various TMDL models. For more information, log onto <<http://www.wef.org/conferences/>>.

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